ECONOMICS, B.S.

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin-Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (http://guide.wisc.edu/undergraduate/ #requirementsforundergraduatestudytext) section of the Guide.

General Education

- Breadth-Humanities/Literature/Arts: 6 credits
- Breadth-Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- · Breadth-Social Studies: 3 credits
- · Communication Part A & Part B *
- · Ethnic Studies *
- Quantitative Reasoning Part A & Part B *
- * The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

COLLEGE OF LETTERS & SCIENCE DEGREE REQUIREMENTS: BACHELOR OF **SCIENCE (B.S.)**

Students pursuing a Bachelor of Science degree in the College of Letters & Science must complete all of the requirements below. The College of Letters & Science allows this major to be paired with either the Bachelor of Arts or the Bachelor of Science degree requirements.

BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Mathematics Complete two courses of 3+ credits at the Intermediate or Advanced level in MATH, COMP SCI, or STAT subjects. A maximum of one course in each of COMP SCI and STAT

subjects counts toward this requirement.

Complete the third unit of a foreign language. Foreign Language

L&S Breadth Complete:

- 12 credits of Humanities, which must include at least 6 credits of Literature; and
- 12 credits of Social Science; and
- 12 credits of Natural Science, which must include 6 credits of Biological Science and 6 credits of Physical Science.

Liberal Arts Complete at least 108 credits. and Science

Coursework

Depth of Complete at least 60 credits at the Intermediate or

Intermediate/ Advanced level.

Advanced Coursework

Major Declare and complete at least one major.

Total Credits Complete at least 120 credits.

UW-Madison Complete both:

• 30 credits in residence, overall, and Experience

• 30 credits in residence after the 86th credit.

Quality of • 2.000 in all coursework at UW-Madison Work

• 2.000 in Intermediate/Advanced level coursework at

UW-Madison

NON-L&S STUDENTS PURSUING AN L&S **MAJOR**

Non-L&S students who have permission from their school/college to pursue an additional major within L&S only need to fulfill the major requirements. They do not need to complete the L&S Degree Requirements above.

OPTIONS IN THE MAJOR

The department offers two major options. Students may declare only one option and must complete all requirements including Residence and Quality of Work standards. Options are:

Option A: Economics provides a well-rounded major in economics that is valuable for employment following graduation, or subsequent graduate work in business, law, public policy, and related disciplines.

Option B: Economics-Mathematical Emphasis provides students with the mathematical and statistical background needed for in-depth study of the analytical aspects of economics. Its requirements are designed to prepare students for graduate study in economics and related fields, or for careers as professional economists in business or government. For specific Mathematical Emphasis requirements, see the section below (p. 3).

REQUIREMENTS FOR THE **ECONOMICS MAJOR**

MATH AND STATISTICS

Code Title Credits Mathematics (complete one): 5-10

MATH 221 Calculus and Analytic Geometry 1

or MATH 211 Calculus

or MATH 275 Topics in Calculus I

MATH 171 Calculus with Algebra and

& MATH 217 Trigonometry I

and Calculus with Algebra and

Trigonometry II

| Statistics (complete one): | | | | |
|----------------------------|---------------|---|--|--|
| Е | CON 310 | Statistics: Measurement in Economics (Recommended) | | |
| S | STAT 302 | Accelerated Introduction to Statistical Methods | | |
| E | CON 400 | Introduction to Applied Econometrics | | |
| E | CON 410 | Introductory Econometrics | | |
| M | MATH/STAT 309 | Introduction to Probability and Mathematical Statistics I | | |
| S | STAT 311 | Introduction to Theory and Methods of Mathematical Statistics I | | |
| S | STAT 324 | Introductory Applied Statistics for Engineers | | |
| S | STAT 340 | Data Science Modeling II | | |
| Total Credits | | | | |

ECONOMICS

30 credits to include:

| Code | Title | Credits |
|------------------------|---|---------|
| Microeconomics & N | 4-8 | |
| ECON 101 & ECON 102 | Principles of Microeconomics and Principles of Macroeconomics | |
| ECON 111 | Principles of Economics- Accelerated Treatment | |
| Intermediate Theor | y (complete one): | 6-8 |
| ECON 301 & ECON 302 | Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory | |
| ECON 311 & ECON 312 | Intermediate Microeconomic Theory - Advanced Treatment and Intermediate Macroeconomic Theory - Advanced Treatment (Honors Econ) | |
| Two Core ECON cou | ırses: ¹ | 6-8 |
| ECON 400 | Introduction to Applied Econometrics | |
| ECON 409 | Study Abroad in Advanced Economics | |
| ECON 410 | Introductory Econometrics | |
| ECON 435 | The Financial System | |
| ECON 441 | Analytical Public Finance | |
| ECON 442 | Macroeconomic Policy | |
| ECON 448 | Human Resources and Economic Growth | |
| ECON 450 | Wages and the Labor Market | |
| ECON 451 | The Economic Approach to Human Behavior | |
| ECON 455 | Behavioral Economics | |
| ECON 458 | Industrial Structure and Competitive Strategy | |
| ECON 460 | Economic Forecasting | |
| ECON 461 | International Macroeconomics | |
| ECON 464 | International Trade | |

| ECON 467 | | |
|--|---|------|
| ECON 467 | International Industrial Organizations | |
| ECON 468 | Industrial Organization and Imperfect Competition | |
| ECON 475 | Economics of Growth | |
| ECON/ FINANCE 503 | Markets with Frictions | |
| ECON 521 | Game Theory and Economic Analysis | |
| ECON 522 | Law and Economics | |
| ECON/R M I 530 | Insuring Life's Risks: Health, Aging, and Policy | |
| ECON/ POP HLTH/ PUB AFFR 548 | The Economics of Health Care | |
| ECON 570 | Fundamentals of Data Analytics for Economists | |
| ECON 580 | Honors Tutorial in Research Project Design | |
| ECON 621 | Markets and Models | |
| ECON 623 | Population Economics | |
| ECON 661 | Issues in International Macroeconomics | |
| ECON 664 | Issues in International Trade | |
| ECON 666 | Issues in International Finance | |
| ECON 690 | Topics in Economics | |
| ECON 695 | Topics in Economic Data Analysis | |
| | | 6-14 |
| | | 0-1- |
| | econ course not used above or one | 0-1- |
| Complete any Core | | 0-1- |
| Complete any Core of these courses: ECON/ | econ course not used above or one | 0-14 |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ | econ course not used above or one Introduction to Finance | 0-1- |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ | Introduction to Finance Development of Economic Thought | 0-1- |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate | 0-14 |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics | 0-14 |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists | 0-14 |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory | 0-14 |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 ECON 321 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics | |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 ECON 321 ECON 330 ECON/A A E/ | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics Money and Banking | |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON/ FINANCE 320 ECON/ FINANCE 320 ECON 321 ECON 330 ECON/A A E/ ENVIR ST 343 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics Money and Banking Environmental Economics The Economics of Growing-up and | |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 ECON 321 ECON 330 ECON/A A E/ ENVIR ST 343 ECON 355 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics Money and Banking Environmental Economics The Economics of Growing-up and Getting Old | |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 ECON 321 ECON 321 ECON 330 ECON/A A E/ ENVIR ST 343 ECON 355 ECON 364 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics Money and Banking Environmental Economics The Economics of Growing-up and Getting Old Survey of International Economics | |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 ECON 321 ECON 321 ECON 330 ECON/A A E/ ENVIR ST 343 ECON 355 ECON 364 ECON 370 ECON/A A E 371 ECON 390 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics Money and Banking Environmental Economics The Economics of Growing-up and Getting Old Survey of International Economics Economics of Poverty and Inequality Energy, Resources and Economics Contemporary Economic Issues | |
| Complete any Core of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 ECON 321 ECON 321 ECON 330 ECON/A A E/ ENVIR ST 343 ECON 355 ECON 364 ECON 370 ECON/A A E 371 ECON 390 | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics Money and Banking Environmental Economics The Economics of Growing-up and Getting Old Survey of International Economics Economics of Poverty and Inequality Energy, Resources and Economics | |
| of these courses: ECON/ FINANCE 300 ECON/ HIST SCI 305 ECON/A A E/ REAL EST/ URB R PL 306 ECON 309 ECON 315 ECON/ FINANCE 320 ECON 321 ECON 321 ECON 330 ECON/A A E/ ENVIR ST 343 ECON 355 ECON 364 ECON 370 ECON/A A E 371 ECON 390 ECON/REAL EST/ | Introduction to Finance Development of Economic Thought The Real Estate Process Study Abroad in Intermediate Economics Data Visualization for Economists Investment Theory Sports Economics Money and Banking Environmental Economics The Economics of Growing-up and Getting Old Survey of International Economics Economics of Poverty and Inequality Energy, Resources and Economics Contemporary Economic Issues | |

| | ECON/ENVIR ST/ POLI SCI/ URB R PL 449 | Government and Natural Resources | |
|---|---|--|----|
| | ECON/A A E/ INTL BUS 462 | Latin American Economic Development | |
| | ECON 465 | The American Economy to 1865 | |
| | ECON/ HISTORY 466 | The American Economy Since 1865 | |
| | ECON/AAE 473 | Economic Growth and Development in Southeast Asia | |
| | ECON/AAE 474 | Economic Problems of Developing Areas | |
| | ECON/AAE 477 | Agricultural and Economic Development in Africa | |
| | ECON/ PHILOS 524 | Philosophy and Economics | |
| | ECON/AAE 526 | Quantitative Methods in Agricultural and Applied Economics | |
| | ECON/A A E/ F&W ECOL 531 | Natural Resource Economics | |
| | ECON/REAL EST/ URB R PL 641 | Housing Economics and Policy | |
| | ECON/SOC 663 | Population and Society | |
| | ECON/A A E/ ENVIR ST/ URB R PL 671 | Energy Economics | |
| ٦ | otal Credits | | 30 |

REQUIREMENTS FOR THE MATHEMATICAL EMPHASIS:

View as listView as grid

· ECONOMICS: MATHEMATICAL EMPHASIS (HTTP://GUIDE.WISC.EDU/ UNDERGRADUATE/LETTERS-SCIENCE/ ECONOMICS/ECONOMICS-BA/ ECONOMICS-MATHEMATICAL-EMPHASIS-BA/)

RESIDENCE AND QUALITY OF WORK

- 2.000 GPA in all ECON and major courses
- 2.000 GPA on 15 upper-level major credits taken in residence²
- 15 credits in ECON, taken on the UW-Madison campus

HONORS IN THE ECONOMICS MAJOR

To participate in Honors in the Economics Major, students must be declared in the Mathematical Emphasis option. For further information, see the Mathematical Emphasis requirements (http://guide.wisc.edu/undergraduate/letters-science/economics/economics-ba/economics-mathematical-emphasis-ba/) and consult your Economics undergraduate advisor.

FOOTNOTES

1

At least two core ECON courses must be taken in residence at UW–Madison, and not via transfer or a UW–Madison Study Abroad program.

2

Intermediate and Advanced level ECON courses are Upper Level in the major.

UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW-Madison,

students must earn a minimum of 120 degree credits.
The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

requirements

Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. "In residence" credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.

Quality of Work

Residency

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.